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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
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| 10/528,643 | 05/19/2006 | Alexis Lavez | H0004223-2900 US | 7139 | |
| 46507 | 7590 | 03/27/2008 | | | |
| HONEYWELL TURBO TECHNOLOGIES 23326 HAWTHORNE BOULEVARD, SUITE #200 TORRANCE, CA 90505 | | | | EXAMINER | |
| | | | WIEHE, NATHANIEL EDWARD | | |
| | | | ART UNIT | PAPER NUMBER | |
| | | | 3745 | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|--------------------------------------|-------------------------------------|
| Office Action Summary | Application No. 10/528,643 | Applicant(s) LAVEZ ET AL. |
| | Examiner NATHANIEL WIEHE | Art Unit 3745 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-8 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-3 and 6-8 is/are rejected.
 7) Claim(s) 4 and 5 is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 17 March 2005 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/06/08)
 Paper No(s)/Mail Date 08212006

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 21 August 2006 is noted. The submission is in compliance with the provisions of 37 CFR 1.97 and 1.98. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

Claims 4 and 5 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4 and 5 not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 8/6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then

narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 2 recites the broad recitation an actuator, and the claim also recites preferably a pneumatic actuator which is the narrower statement of the range/limitation.

Claim 8/6 is recites the limitation "the set of increasing the axial clearance" and "the step of decreasing the axial clearance" in lines 3 and 8, respectively. There is insufficient antecedent basis for this limitation in the claim. Specifically claim 6 includes only the step of varying an axial clearance and therefore does not provide sufficient antecedent basis for the limitations of claim 8.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,6,7 and 2, as far as it is definite, are rejected under 35 U.S.C. 102(b) as being anticipated by Daudel et al. (6,314,736), hereinafter "Daudel". Daudel discloses a variable nozzle device for a turbocharger including an annular nozzle (11) including a plurality of adjustable vanes (12) defining a plurality of nozzle passages. Daudel also

discloses an outer wall (10) that is controllably varied, through the use of a pneumatic actuator (19), to provide an axial clearance between the vanes and the outer wall. Daudel's damping ring (33) and spring (34) constitute a spacer defining the minimum axial clearance between the vanes and the outer wall. Further, Daudel discloses the step of increasing the axial clearance when the operation rotation speed of the turbocharger increase (Daudel column 4, lines 42-44).

Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hunter (2,976,013). Hunter discloses a variable nozzle device for a turbocharger including an annular nozzle having a plurality of adjustable vanes (22) defining a plurality of nozzle passages. Hunter also discloses an outer wall (40) that is controllably varied to adjust the axial clearance between the outer wall and the vanes. This control is exhibited by the spring (45), which provides a variable force acting against the wall during operation of the turbocharger and constitutes a spacer defining a minimum axial clearance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunter (2,976,013) in view of Leavesley (5,214,920). Hunter discloses the invention substantially as claimed except for the use of an axial slit forming a bypass for exhaust

gas not passing through the nozzle. However, Leavesley discloses a turbocharger nozzle assembly having a split vane (102,104) arrangement that provides gaps there between providing a bypass for the exhaust gas not traveling through the nozzle passages. Leavesley's arrangement provides the advantage of allowing the axial inlet area of the nozzles to be reduced by more than 50% (Leavesley column 7, lines 64-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hunter by utilizing a split nozzle as taught by Leavesley for the purpose of allowing the axial inlet area of the nozzle to be reduced more than 50%.

Allowable Subject Matter

Claim 8/7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The instant invention is deemed to be a non-obvious improvement over the invention of U.S. Pat. No. 6,314,736. The improvement comprises the use of a method having the steps of simultaneously or independently adjusting the axial clearance as well as the vanes of a turbocharger's nozzle to enlarger or reduce the gas flow are of the nozzle.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHANIEL WIEHE whose telephone number is

(571)272-8648. The examiner can normally be reached on Mon.-Thur. and alternate Fri., 7am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571)272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NATHAN WIEHE/
Nathan Wiehe
Examiner
Art Unit 3745

/Edward K. Look/
Supervisory Patent Examiner, Art Unit 3745